

COPY FOR IB

Rec'd PCT/PTO 29 JUN 2004

PATENT COOPERATION TREATY

PCT

REC'D 07 MAY 2004

WIPO

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| | | |
|---|---|--|
| Applicant's or agent's file reference PN0487/PCT | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/KR2003/000068 | International filing date (day/month/year) 14 JANUARY 2003 (14.01.2003) | Priority date (day/month/year) 15 JANUARY 2002 (15.01.2002) |
| International Patent Classification (IPC) or national classification and IPC IPC7 A61C 8/00 | | |
| Applicant CHANG, Sang-Kohn | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

| | |
|--|---|
| Date of submission of the demand 02 JULY 2003 (02.07.2003) | Date of completion of this report 20 APRIL 2004 (20.04.2004) |
| Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140 | Authorized officer KIM, Hee Seung Telephone No. 82-42-481-8157  |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR2003/000068

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☐ the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement) under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

| | | | |
|-------------------------------|--------|-----|-----|
| Novelty (N) | Claims | 1-5 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | 1-5 | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | 1-5 | YES |
| | Claims | | NO |

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D1) US 4,486,178 A
D2) US 5,007,835 A
D3) US 5,312,255 A
D4) JP 54-156389 U

I -Novelty:

Claim 1 of the present invention is concerned with the dental implant system comprising the implant root having a taped post portion with a circular rim groove of upper portion thereof and a planting portion with multiple protruded circular pins, the abutment with a well in the lower and the upper side and the crown engaged to an upper side of the abutment. Although D1, D2 and D4 cited in the international search report disclose an implant comprising an implant root with a post portion engaged to a well of the abutment and a planting portion, the shape and composition of abutment are slightly different from that of claim 1 of the present invention. And also, all documents cited in the international search report do not reveal a circular rim groove of a post portion.

Accordingly, the subject matter of claim 1 seems to be novel.(PCT Article 33(2)). Claims 2-5 also comply with PCT Article 33(2) as they are dependent claims.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR2003/000068

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

V.

II -Inventive step:

Even if the inventions of D1, D2 and D4 have an implant root with a post portion engaged to a well of the abutment and a planting portion, claim 1 is different from said three prior arts in the bonding structure and composition of a taped post portion, multiple protruded circular pins of a planting portion and abutment with an expanded portion. The invention of D3 does not have an abutment which combines the implant root with a crown. In addition, none of the documents cited in the International Search Report disclose a circular rim groove of a post portion which prevents the implant from escaping due to a certain friction force and there is no suggestion in any of the documents, either alone or in combination, which would lead to the solution posed by the present invention. Thus, claim 1 of the present invention meets the criteria set out in PCT Article 33(3). Claims 2-5 also comply with PCT Article 33(3) as they are dependent claims.

Claims 1-5 meet the criteria set out in PCT Article 33(4) as they are directed to an implant.